

1. IDENTIFICATION OF SUBSTANCE AND COMPANY DETAILS

1.1 Product identifier

Product name : RUBIC Buffer Screen
 Product number : MD1-96
 EC No. : See section 3
 REACH registration number : See section 3
 CAS No. : See section 3

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Research and Development
 Uses advised against : Not for drug, household or uses other than those identified

1.3 Details of the supplier of the Safety Datasheet

Supplier : Molecular Dimensions Limited
 Address : Unit 6 Goodwin Business Park
 Willie Snaith Road
 Newmarket
 Suffolk
 CB8 7SQ
 United Kingdom
 Telephone : +44 (0)1638 561051
 Fax : +44 (0)1638 660674
 Email address : enquiries@moleculardimensions.com

1.4 Emergency telephone number

Emergency phone number : 999

2. HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

H315 Causes skin irritation
 H319 Causes serious eye irritation
 H302 Harmful if swallowed
 H314 Causes severe skin burns and eye damage
 H318 Causes serious eye damage
 H335 May cause respiratory irritation
 H360D May damage the unborn child

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]



2.3 Other hazards

No data available

Precautionary codes

P261 Avoid breathing dust/fume/gas/mist/vapours/spray
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
 P201 Obtain special instructions before use
 P280 Wear protective gloves/protective clothing/eye protection/face protection
 P310 Immediately call a POISON CENTER or doctor/physician

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Chemical	EC No.	REACH No.	CAS No.	Concentration	H-code(s)	P-code(s)
Ammonium acetate	211-162-9	-	631-61-8	0.119		
BICINE	-	-	150-25-4	0.06-0.119		
BIS-TRIS	230-237-7	-	6976-37-0	0.06-0.179	H315 H319 H335	P261 P305+P351+P338
BIS-TRIS propane	-	-	64431-96-5	0.06		
CHES	203-115-6	-	103-47-9	0.119	H319	P305+P351+P338
Citric acid	201-069-1	-	77-92-9	0.119-0.179	H319	P305+P351+P338
Glycine	200-272-2	-	56-40-6	0.052		
HEPES	-	-	7365-45-9	0.024-0.298		
Imidazole	206-019-2	01-2119485825-24-XXXX	288-32-4	0.06-0.595	H302 H314 H360D	P201 P280 P305+P351+P338 P310
MES monohydrate	224-632-3	-	145224-94-8	0.06-0.119	H315 H319 H335	P261 P305+P351+P338
MOPS	214-478-5	-	1132-61-2	0.06-0.119	H315 H319 H335	P261 P305+P351+P338
PIPES	-	-	5625-37-6	0.06		
Potassium phosphate dibasic	231-834-5	-	7758-11-4	0.119		
Sodium acetate trihydrate	-	-	6131-90-4	0.119		
Sodium chloride	231-598-3	-	7647-14-5	0.06-1.19		
Sodium phosphate dibasic dihydrate	-	-	10028-24-7	0.024-0.298		
Sodium phosphate monobasic monohydrate	-	-	10049-21-5	0.0521		
Succinic acid	203-740-4	-	110-15-6	0.0149	H315 H318 H335	P261 P280 P305+P351+P338
Tricine	-	-	5704-04-1	0.119		
Trizma® base	201-064-4	-	77-86-1	0.06	H315 H319 H335	P261 P305+P351+P338
Trizma® hydrochloride	-	-	1185-53-1	0.024-0.298		

4. FIRST AID MEASURES

4.1 Description of first aid measures

General notes

Consult a doctor. Show this safety datasheet to the doctor in attendance

Following inhalation

Move to fresh air. If not breathing, give artificial respiration. Consult doctor.

Following skin contact

Take off contaminated clothing & shoes immediately. Wash with soap & water. Seek immediate medical attention

Following eye contact

Rinse thoroughly for at least 15 minutes. consult a doctor.

Following ingestion

Do NOT induce vomiting. Rinse mouth with water. Consult doctor.

Self-protection for first aider

Always use recommended PPE when treating patient

4.2 Most important symptoms and effects, both acute and delayed

The most important known effects are detailed in section 2.2 and section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIRE-FIGHTING METHODS

5.1 Extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide

5.2 Special hazards arising from the substance or mixture

May contain:

Carbon oxides, Sodium oxides, Potassium oxides, Nitrogen oxides, Hydrogen chloride gas

5.3 Advice for firefighters

Wear breathing apparatus. Use water spray to cool unopened containers

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment including respiratory protection. Avoid breathing vapours

6.2 Environmental precautions

Do not let product enter drains

6.3 Methods and materials for containment and clean up

Evacuate personnel to safe areas. soak up with inert absorbant material. Keep in suitable closed container for disposal. Do not flush with water

6.4 Reference to any other sections

For disposal see section 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

For precautions see section 2.2

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in well-ventilated place. Containers which are opened must be carefully resealed and stored upright to prevent leakage

7.3 Specific end use

Appart from uses in section 1.2, no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

No chemicals in this product have any control parameters

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Wash hands before work break and at the end of the day

8.2.2 Personal protection

Eye/face protection

Face shield & safety specs

Skin protection

Nitrile gloves (splash protection only) and lab coat

Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as CEN (EU) as back up to engineering control.

Environmental exposure controls

Do not let product enter drains

9. PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance	: Transparent liquid
b) Odour	: No data available
c) Odour threshold	: No data available
d) pH	: No data available
e) Melting point / freezing point	: No data available
f) Initial boiling point and boiling range	: No data available
g) Flash point	: No data available
h) Evaporation rate	: No data available
i) Flammability	: No data available
j) Upper / lower flammability or exposure limits	: No data available
k) Vapour pressure	: No data available
l) Vapour density	: No data available
m) Relative density	: No data available
n) Solubility(ies)	: No data available
o) Partition coefficient: n-octanol / water	: No data available
p) Auto-ignition temperature	: No data available
q) Decomposition temperature	: No data available
r) Viscosity	: No data available
s) Explosive properties	: No data available
t) Oxidising properties	: No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity	: No data available
10.2 Chemical stability	: No data available
10.3 Possibility of hazardous reactions	: No data available
10.4 Conditions to avoid	: No data available
10.5 Incompatible materials	: Strong oxidising agents, Strong acids, Strong bases
10.6 Hazardous decomposition materials	: No data available. In case of fire see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (mixtures)

a) Acute toxicity	: No data available
b) Skin corrosion / irritation	: No data available
c) Serious eye damage / Irritation	: No data available
d) Respiratory or skin sensitization	: No data available
e) Germ cell mutagenicity	: No data available
f) Carcinogenicity	: No data available
g) Reproductive toxicity	: No data available
h) STOT - single exposure	: No data available
i) STOT - repeated exposure	: No data available
j) Aspiration hazard	: No data available

11.1.9 Delayed and immediate effects as well as chronic effects from short to long term exposure

Symptoms
Vomiting, diarrhoea, damage to tooth enamel, dermatitis
Material is extremely destructive to mucous membranes & upper respiratory tract.
Vomiting, diarrhoea, dehydration, congestion in internal organs. Inflammatory reactions in gastrointestinal tract

12. ECOLOGICAL INFORMATION

12.1 Toxicity	: No data available
12.2 Persistence and degradability	: No data available
12.3 Bioaccumulative potential	: No data available
12.4 Mobility in soil	: No data available
12.5 Results of PBT and vPvB assessment	: No data available
12.6 Other adverse effects	: No data available

13. DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product / packaging disposal**

Dispose of packaging as unused product. Offer surplus and non-recyclable solutions to a licensed disposal company
Observe all EU and local environmental regulations

14. TRANSPORT INFORMATION**14.1 UN number**

A.R.D./R.I.D.	Not Hazardous	I.M.D.G.	Not Hazardous	I.C.A.O.-T.I.	Not Hazardous	A.D.N.	Not Hazardous
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14.2 UN proper shipping name

A.R.D./R.I.D.	Not dangerous			I.M.D.G.	Not dangerous		
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I.C.A.O.-T.I.	Not dangerous			A.D.N.	Not dangerous		
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14.3 Transport hazard class(es)

A.R.D./R.I.D.	Not hazardous	I.M.D.G.	Not hazardous	I.C.A.O.-T.I.	Not hazardous	A.D.N.	Not hazardous
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14.4 Packaging group

A.R.D./R.I.D.	Not hazardous	I.M.D.G.	Not hazardous	I.C.A.O.-T.I.	Not hazardous	A.D.N.	Not hazardous
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14.5 Environmental hazards

A.R.D./R.I.D.	Not hazardous	I.M.D.G.	Not hazardous	I.C.A.O.-T.I.	Not hazardous	A.D.N.	Not hazardous
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14.6 Special precautions for user

A.R.D./R.I.D.	No data available	I.M.D.G.	No data available				
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I.C.A.O.-T.I.	No data available	A.D.N.	No data available				
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15. REGULATORY INFORMATION**15.1 Safety, health and environmental regulations / legislation specific for the substance of mixture**

No data available

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

16. OTHER INFORMATION**a) Changes since last revision**

None

b) Key to any abbreviations used

PPE

Personal protective equipment

A.R.D./R.I.D.

International Carriage of Dangerous Goods by Road / Rail

I.M.D.G.

International Maritime Dangerous Goods

I.C.A.O.-T.I.

Technical Instructions for the Safe Transport of Dangerous Goods by Air

A.D.N.

International Carriage of Dangerous Goods by Inland Waterways

c) References and sources for data

sigma-aldrich.com

d) Indication of methods used for classification (mixtures only)

No data available

e) List of Hazard and Precautionary phrase not listed in full in other sections

See section 2.1

f) Advice for training for workers to ensure protection to human health and environment

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Molecular Dimensions Ltd., shall not be held liable for any damage resulting from handling or from contact with the above product.